PROSPECT ISLAND RESTORATION PLANNING UPDATE

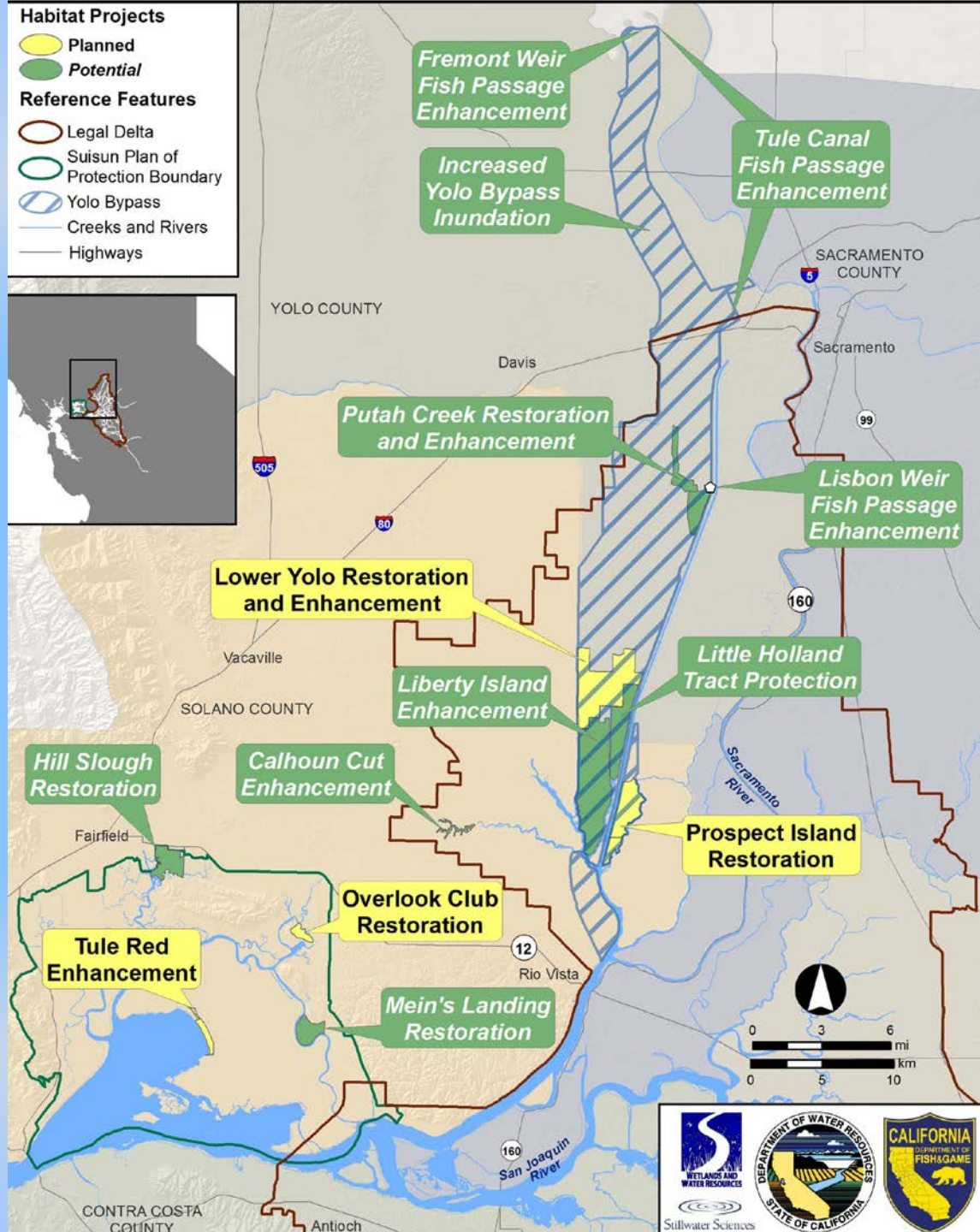
November 29, 2012

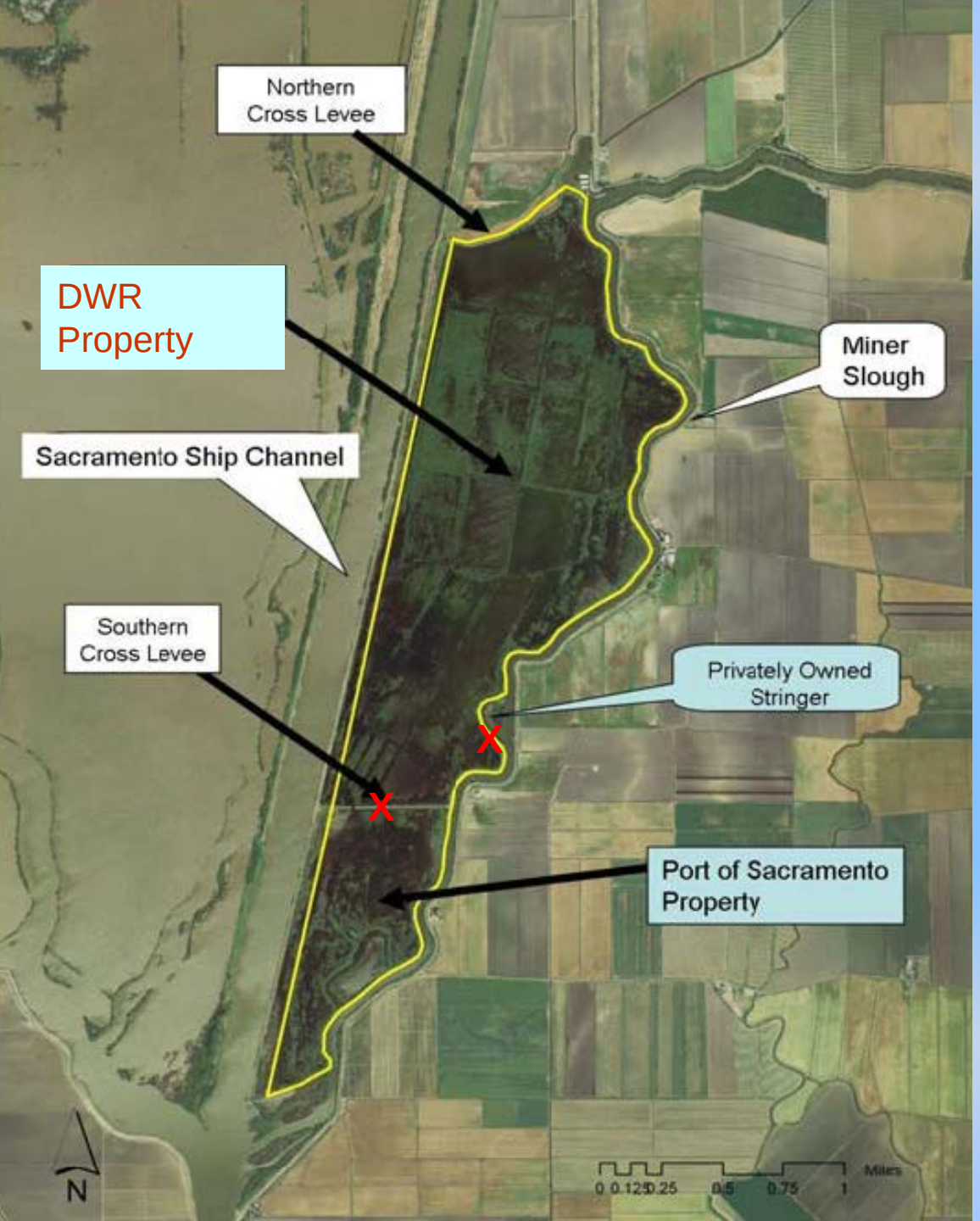
Fish Restoration Program Agreement (FRPA)

- Executed October 2010
- Joint DWR and DFG program
- Fulfill habitat restoration requirements
  - USFWS Delta Smelt BiOp, RPA 4
  - NMFS Salmonid BiOp, Action 1.6.1
  - DFG Longfin Smelt ITP, Condition 7

FRPA Near-term Actions

- Planned and potential projects





Prospect Island

- Historically farmed
- Part of Yolo Bypass
- Bought by USBR in 1994 for NDNWR
- 2000 – Congress fails to authorize NDNWR
- 2009 – Federal Govt. makes available via PBC process
- Northern 3/4 of the island acquired by DWR in 2010

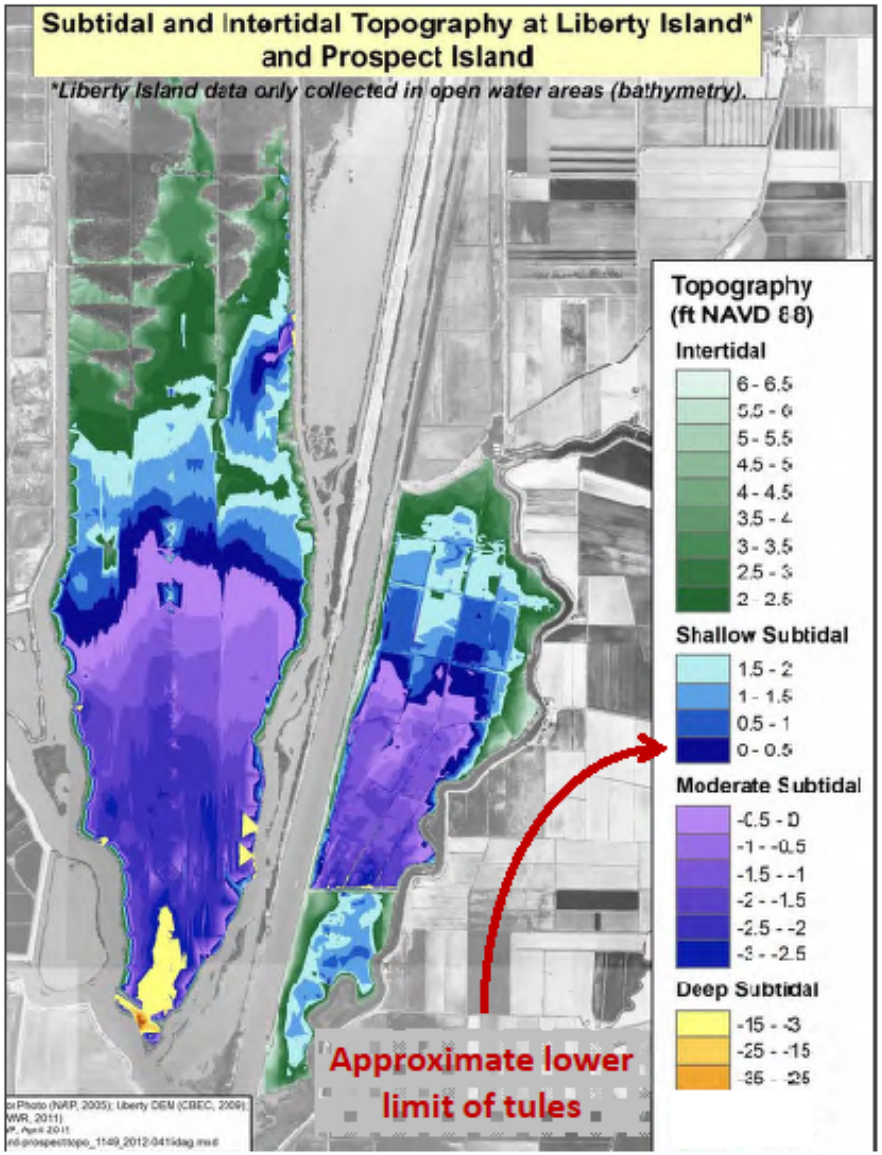
Prospect Island Existing 'Feral' Vegetation











Existing Topography

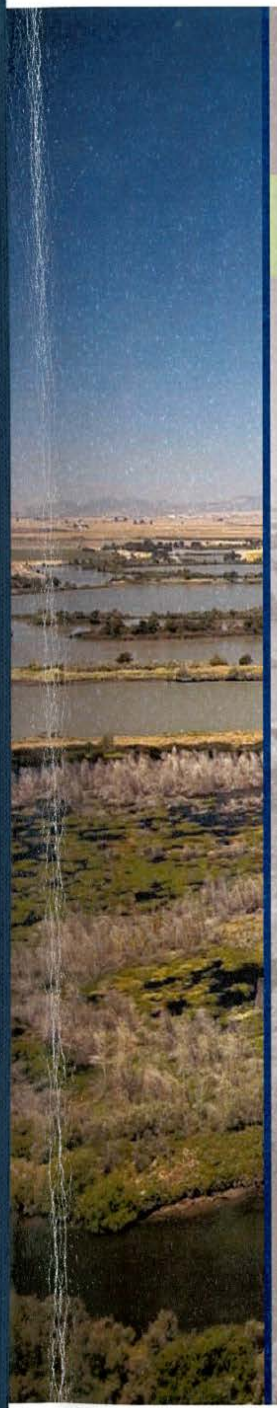
- Extensive deeper acreage at Liberty vs. Prospect
- Liberty deep scour hole at main breach, second scour hole at secondary breach; anticipate at Prospect
- Liberty has extensive perimeter connectivity through eroded levee; maintain or abandon Prospect levees?
- Liberty has extensive unvegetated areas within suitable emergent vegetation elevation: Substrate? Wind fetch? BREACH III. Promote emergent veg at Prospect

Goals and Objectives

GOAL: Achieve long-term ecological restoration to partially fulfill the 8,000-acre tidal restoration obligations in the Delta Smelt Biological Opinion

OBJECTIVES:

- Enhance productivity and food availability for native Delta fishes;
- Restore processes that will promote primary and secondary productivity and tidal transport of resources;
- Increase the amount and quality of salmonid rearing and other habitat;
- Increase the survival of juvenile salmonids through the Delta by potentially enhancing beneficial migratory pathways;
- Provide other ecosystem services associated with Delta increased freshwater tidal marsh habitat.



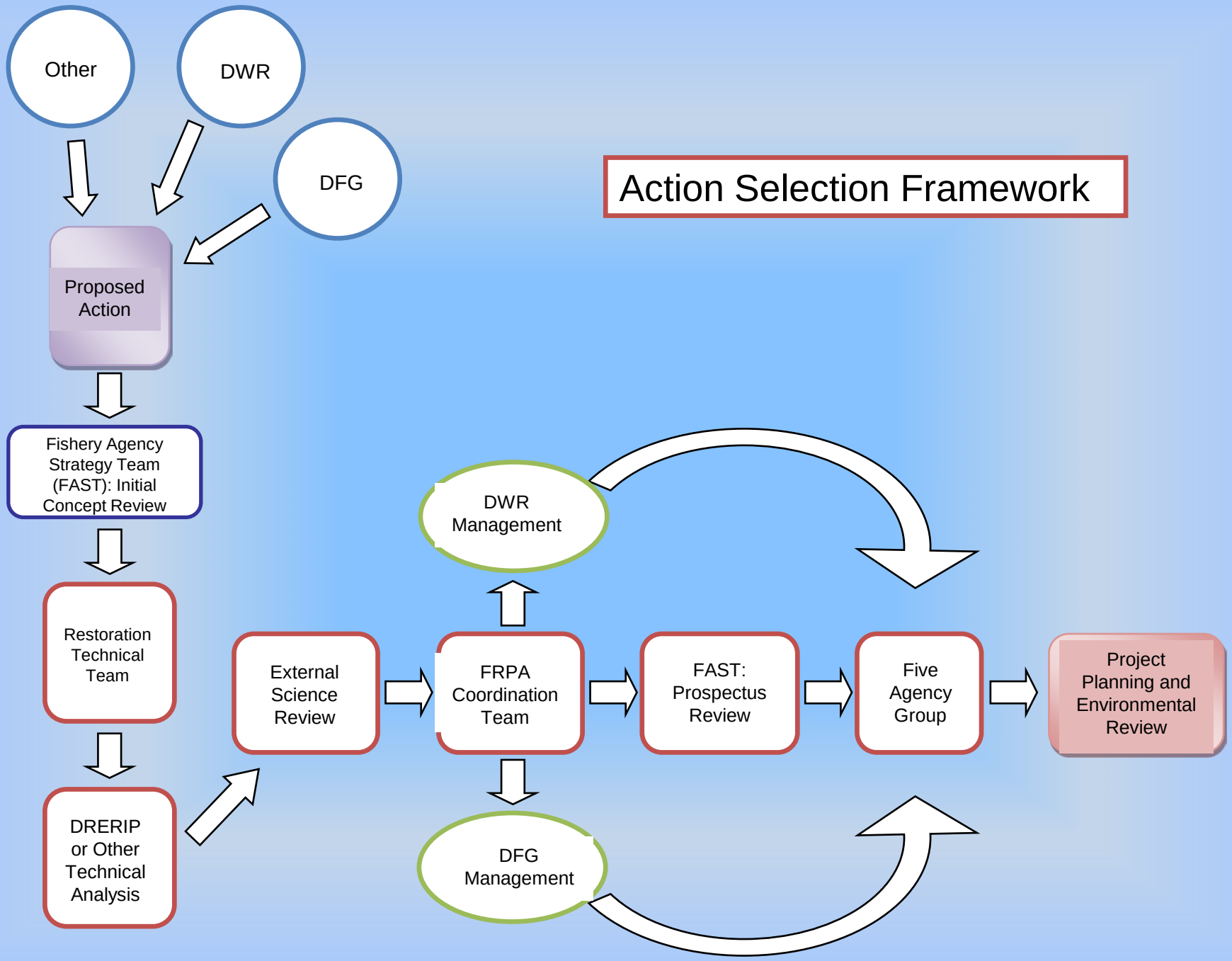
Fish Restoration Program Agreement

Implementation Strategy

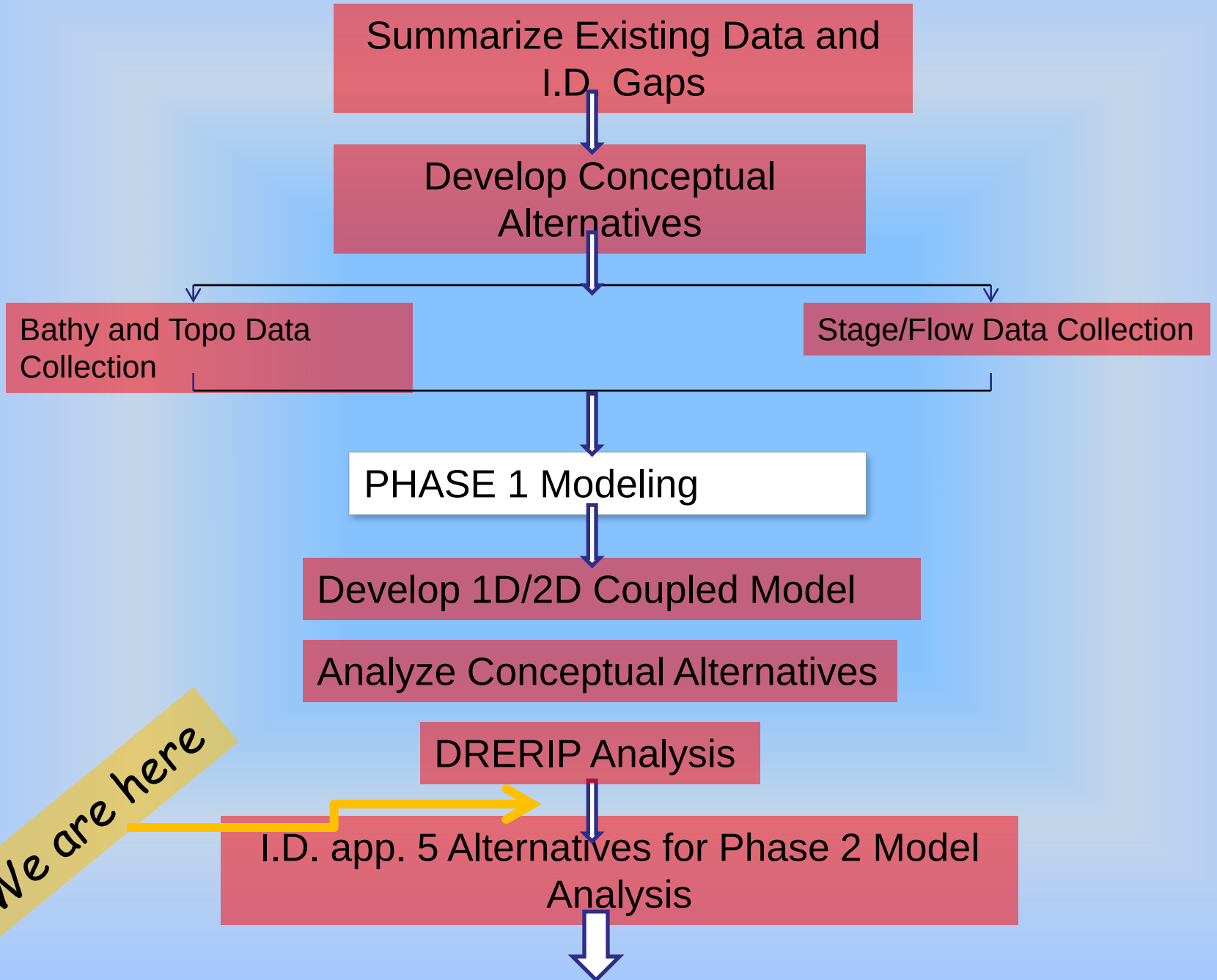
Habitat Restoration and Other Actions for Listed Delta Fish

Department of Water Resources and Department of Fish and Game in coordination with the US Fish and Wildlife Service and the National Marine Fisheries Service

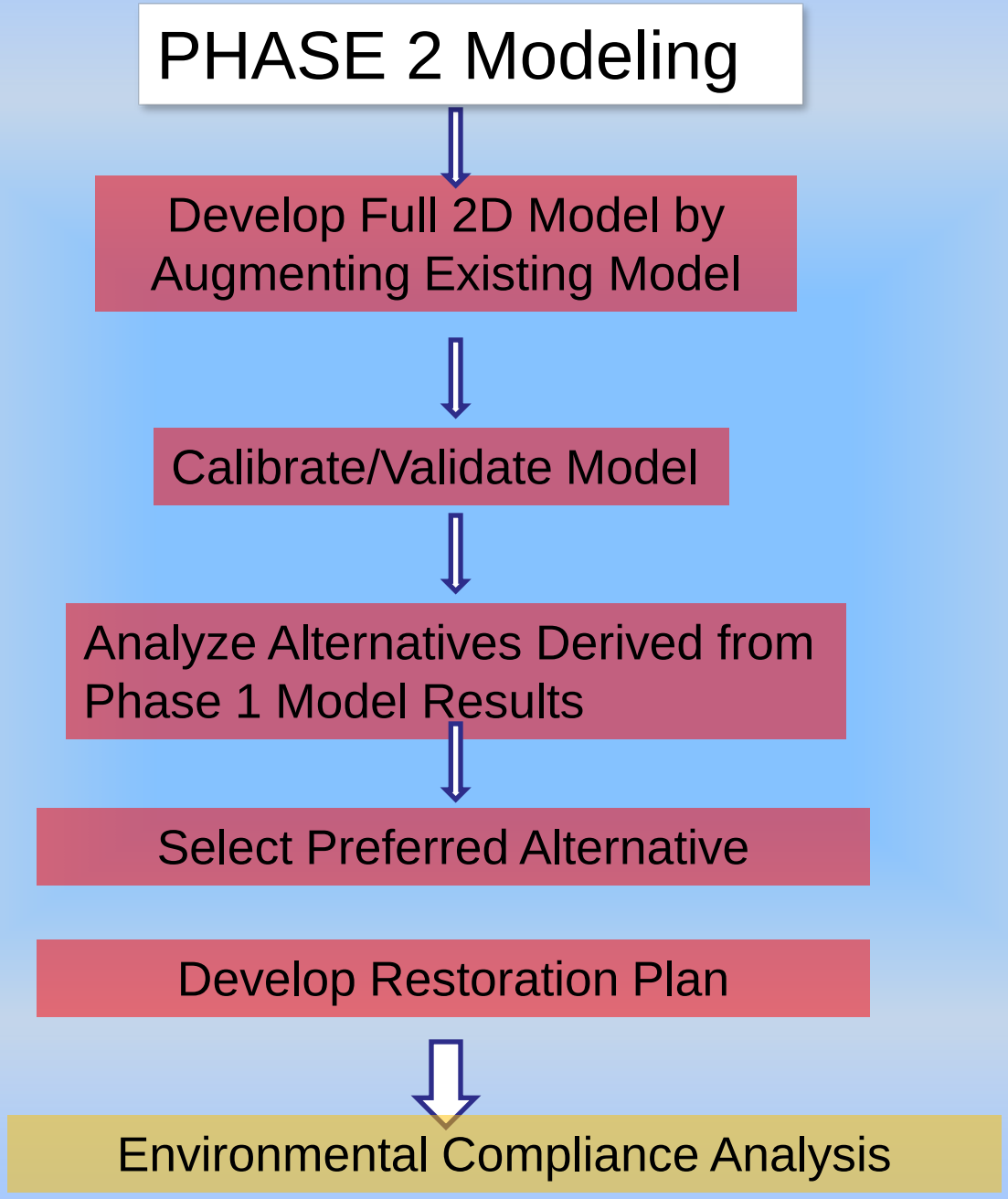
Action Selection Framework



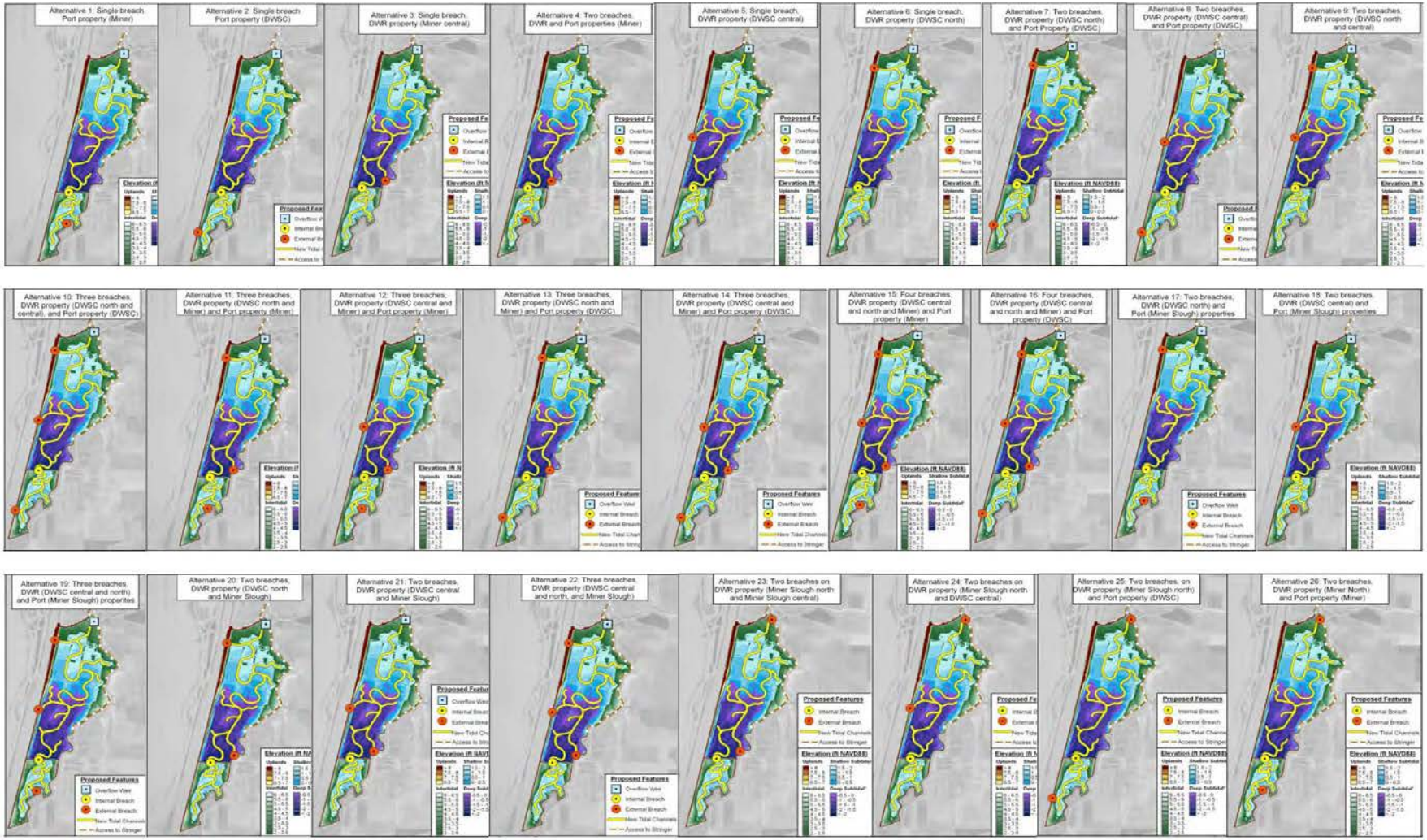
DESIGN ALTERNATIVES ANALYSIS



DESIGN ALTERNATIVES ANALYSIS, cont.

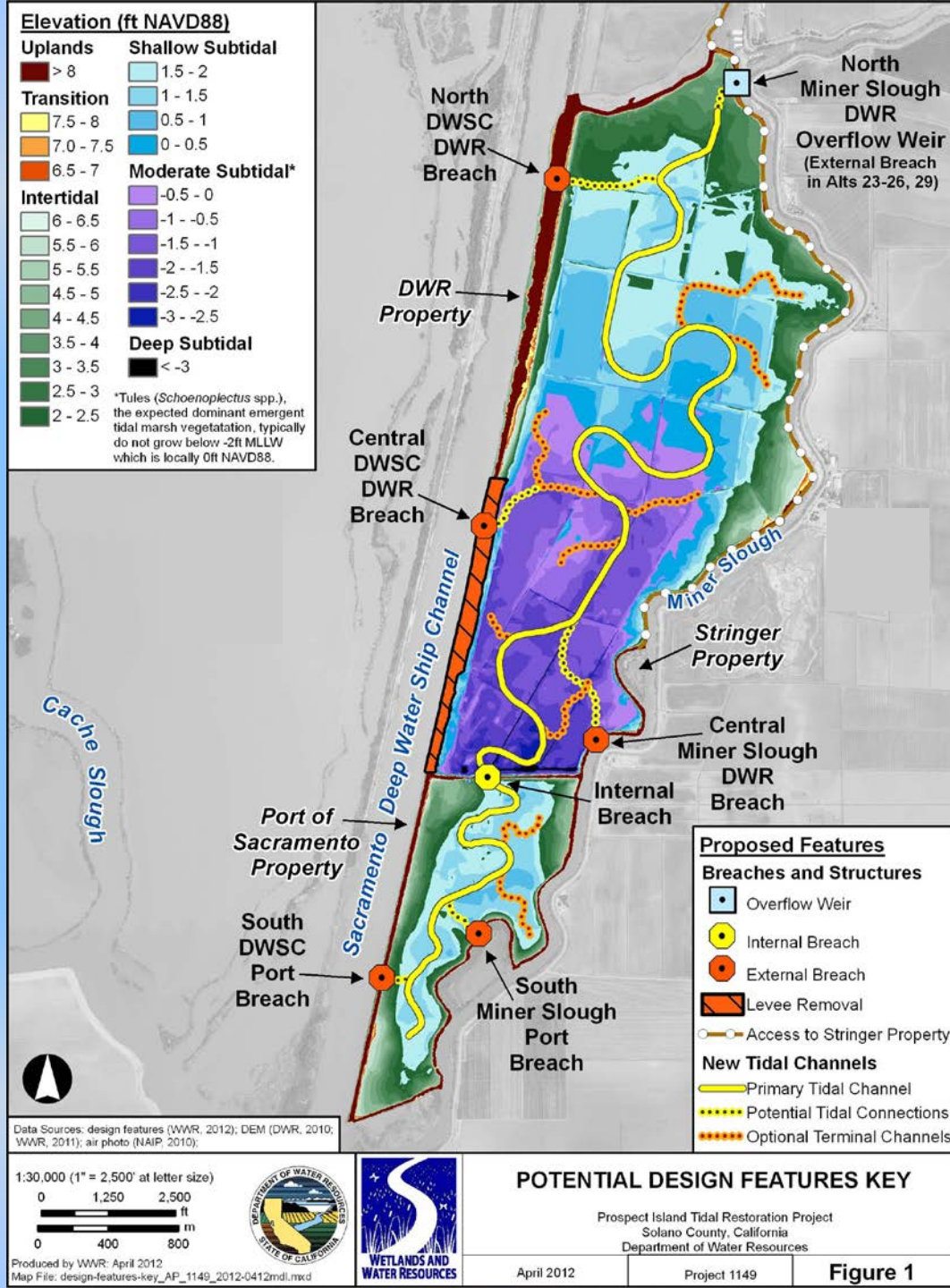


26 ALTERNATIVES!



Design Features Key

- Breaches
- Overflow weir
- Primary channels
- Secondary branch channels
- Connecting channels depending on selected breaches
- DWR and Port properties
- Adjacent property access



_Next Steps

1. Refinement of alternatives to 5;
2. Phase 2 hydrologic modeling and analysis
3. Public input/scoping
4. Revise design alternatives, if needed
5. Environmental documentation/public input
6. Permits
7. Construction
8. Monitor
9. Adapt
10. Manage

Challenges

- Incorporation of the Port Property into the project;
- DWSC Levee Breaches;
- Miner Slough Levee Breaches;
- Interim Land and Levee Management;
- Barker Slough Pumping Plant
- Potential Effects on Ryer Island
- Easements on Prospect Island